



Main

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|------------------------------|-------------------------------------|
| Range of product | OsiSense XCC |
| Encoder type | Single turn absolute encoder |
| Device short name | XCC |
| Product specific application | - |
| Diameter | 58 mm |
| Shaft diameter | 6 mm |
| Shaft type | Solid shaft |
| Resolution | 8192 points |
| Electrical connection | 1 male connector M23 radial 12 pins |
| Output stage | Type SB |
| Type of output stage | SSI 13-bit binary |
| [Us] rated supply voltage | 11...30 V DC |
| Enclosure material | Zamak |

Complementary

| | |
|--------------------------|---|
| Shaft tolerance | G7 |
| Residual ripple | 500 mV |
| Maximum revolution speed | 9000 rpm |
| Shaft moment of inertia | 10 g.cm ² |
| Torque value | 0.004 N.m |
| Maximum load | 10 daN radial 5 daN axial |
| Output frequency | 100...1000 kHz |
| Current consumption | 0...100 mA no-load |
| Protection type | Short-circuit protection Reverse polarity protection |
| Maximum output current | 20 mA |
| Physical interface | RS422 |
| Output level | High level: 2 V minimum 20 mA |
| Surge withstand | 1 kV, level 2 conforming to IEC 61000-4-5 |
| Base material | Aluminium |

| | |
|-----------------------|-----------------|
| Shaft material | Stainless steel |
| Type of ball bearings | 6000ZZ1 |
| Product weight | 0.49 kg |

Environment

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|---------------------------------------|--|
| Marking | CE |
| Ambient air temperature for operation | -20...90 °C |
| Ambient air temperature for storage | -30...95 °C |
| IP degree of protection | IP65 conforming to IEC 60529 |
| Vibration resistance | 10 gn (f= 10...2000 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 30 gn for 11 ms conforming to IEC 60068-2-27 |
| Resistance to electrostatic discharge | 4 kV (contact discharge) level 3 conforming to IEC 61000-4-2 8 kV (air discharge) level 3 conforming to IEC 61000-4-2 |
| Resistance to electromagnetic fields | 10 V/m level 3 conforming to IEC 61000-4-3 |
| Resistance to fast transients | 1 kV signal ports level 3 conforming to IEC 61000-4-4 2 kV power ports level 3 conforming to IEC 61000-4-4 |

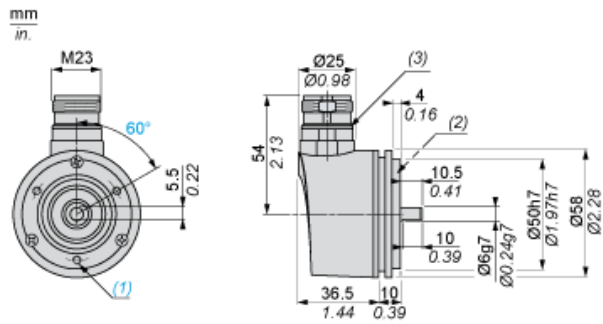
Offer Sustainability

| | |
|----------------------------|---|
| RECh free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |

Contractual warranty

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|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions

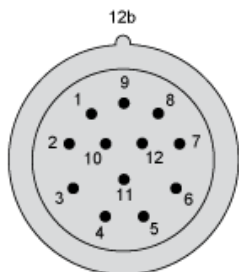


- (1) 3 M4 holes at 120° on 42 PCD, depth: 10 mm
- (2) Collar XCCRB1 mounted
- (3) Nitrile seal

Wiring Diagram

M23, 12-pin Connector, Anticlockwise Connections

Male Connector on Encoder



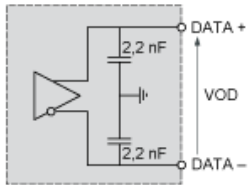
| Pin number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---------------|-----|--------|-------|---|------------------|---|---|-----|---|--------|-------|----|
| Signal Supply | 0 V | Data + | Clk + | R | Direction (1) | R | R | + V | R | Data - | Clk - | R |

(1) : Clockwise direction, 5 to 0 V
 : Anticlockwise direction, 5 to + V

R = Reserved (do not connect)

Technical Description

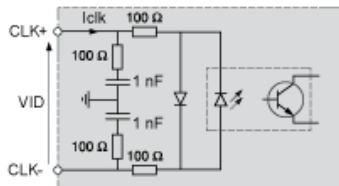
RS 422 Data Output



(1)

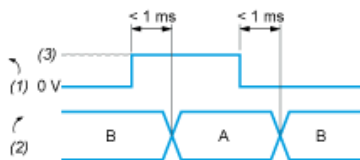
(1) $I_{data} = 20 \text{ mA}$ $|VOD| > 2 \text{ V}$

Isolated Clock Input



VID maximum: 5 V
 Iclk maximum: 15 mA

DIRECTION Input



A : Anticlockwise
 B : Clockwise
 (1) DIRECTION input
 (2) DIRECTION of counting
 (3) V supply